


Optic fiber implantation

MA Mehran Ahmadlou JH J. Alexander Heimel

Updated date: Jun 9, 2021

 An abbreviated version of this protocol was published in Science in May 2021

A cell type-specific cortico-subcortical brain circuit for investigatory and novelty-seeking behavior

DOI: [10.1126/science.abe9681](https://doi.org/10.1126/science.abe9681)

Detailed protocol

1. 10-15 minutes wait after virus injection (using nanoject II or III)
2. using a holder connected to stereotactic arm slowly lower down (e.g. 0.5 mm / min) the fiber optic (e.g. ZF1.25 200um fiber) and stop 100-200 um above the region of interest and cement it to the skull (e.g. using optibond and tetric flow light-cure cement). Cement should cover 40-60% of the ferrule (fiber cannula).

How to cite: (Readers should cite both the Bio-protocol preprint and the original research article where this protocol was used)

1. Ahmadlou, M. and Heimel, J. (2021). Optic fiber implantation. Bio-protocol Preprint. bio-protocol.org/prep1146.
2. Ahmadlou, M., Houba, J. H. W., Vierbergen, J. F. M. V., Giannouli, M., Gimenez, G., Weeghel, C. V., Darbanfouladi, M., Shirazi, M. Y., Dziubek, J., Kacem, M., Winter, F. D. and Heimel, J. A. (2021). A cell type-specific cortico-subcortical brain circuit for investigatory and novelty-seeking behavior. Science 372(6543). DOI: [10.1126/science.abe9681](https://doi.org/10.1126/science.abe9681)

Copyright: Content may be subjected to copyright.